

WHAT IS CLAIMED IS:

1        1. A plasma display panel, wherein a phosphor constituting  
2        a fluorescent layer of said plasma display panel is made of  
3        mono-crystal particles, said mono-crystal particles each having  
4        a diameter of 10-200 nanometers.

1        2. The plasma display panel according to claim 1, wherein  
2        a reflection layer for reflecting a light emitted from said  
3        phosphor is provided below said fluorescent layer.

1        3. The plasma display panel according to claim 2, wherein  
2        said reflection layer is made of white pigment powder.

1        4. The plasma display panel according to claim 2, wherein  
2        between said fluorescent layer and said reflection layer is  
3        provided a color filter layer for selectively transmitting only  
4        a predetermined-wavelength visible light.

1        5. The plasma display panel according to claim 4, wherein  
2        said color filter layer is made of an inorganic pigment.

1        6. The plasma display panel according to claim 1, wherein  
2        said fluorescent layer has a film thickness of 0.05-1.0  
3        mirometers.

1        7. The plasma display panel according to claim 2, wherein  
2        said reflection layer has a film thickness of 1-20  $\mu\text{m}$ .

1        8. The plasma display panel according to claims 4, wherein  
2        said inorganic pigment used to form said color filter layer has  
3        an average particle diameter of 10-200 nanometers.

1        9. The plasma display panel according to claim 4, wherein  
2        said color filter layer has a film thickness of 10-200 nanometers.

1        10. A plasma display panel in which a rear-side glass  
2        substrate provided with a data electrode covered by a white  
3        dielectric and a front-side glass substrate provided with a  
4        transparent electrode and a trace electrode covered by a  
5        protection layer and a transparent dielectric are both sealed by  
6        a sealing material, in which a discharge cell separated by a  
7        partition is formed, in which on said white dielectric and said  
8        partition is formed a fluorescent layer made of a fluorescent  
9        material, wherein a fluorescent layer is formed in such a manner  
10      as to cover said protection layer of said front-side glass  
11      substrate, said fluorescent material of said fluorescent layer  
12      being made of mono-crystal particles having a particle diameter  
13      of 10-200 nanometers.

1        11. The plasma display panel according to claim 10, wherein  
2        said fluorescent layer has a film thickness of 0.05-0.5  
3        nanometers.

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